

ABSTRACT

An interface unit for receiving a body part of a subject at which a noninvasive hematocrit measurement is to be obtained. The interface unit includes a narrow monitoring element with a receptacle for receiving at least a portion of the body part and contacts that are configured for establishing electrical communication with contacts of electrodes that are to be positioned over the receptacle before the body part is placed therein. In addition, the monitoring element may include a pressure ports that communicates pressure into the receptacle. The interface unit also includes a cover which is configured to partially enclose the body part, to ensure that electrical communication is established between the contacts and the electrodes, and to facilitate the application of pressure to the body part. The electrodes may be in the form of electrically isolated electrode pairs, which may be formed as a strip with minimal material wastage.